



DoD Supply Chain Integration Performance Metrics using RFID

April 8, 2008

Objective

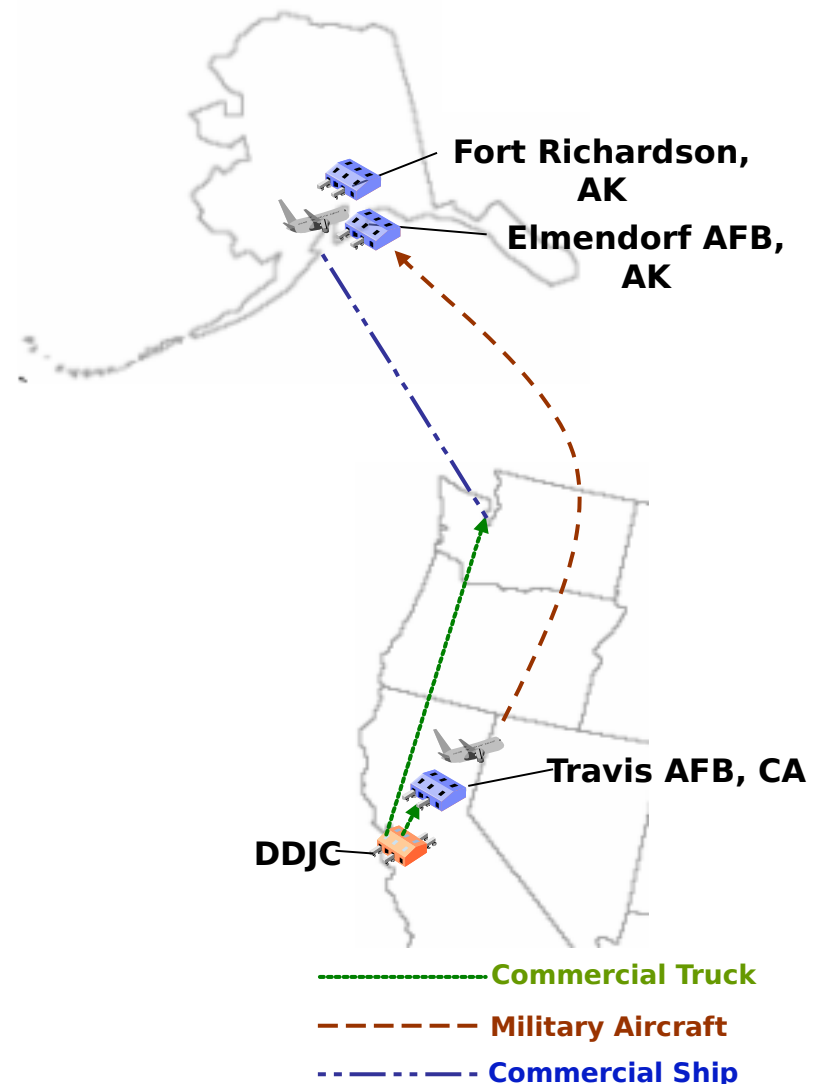
- Demonstrate how passive RFID...
 - Captures precise measurement of materiel flow
 - Identifies potential opportunities for improvement
 - Improved business processes (Lean Six Sigma approach)
 - Timely system updates

Using RFID to highlight opportunities for improvement

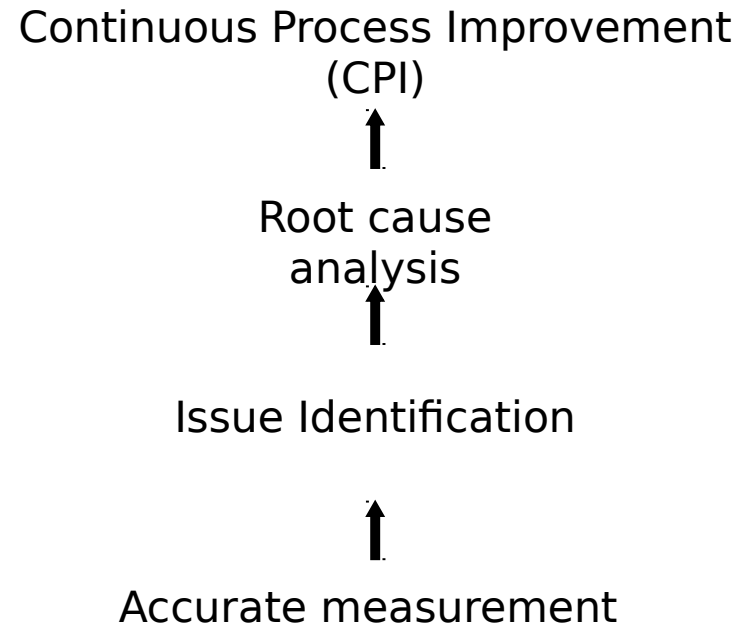
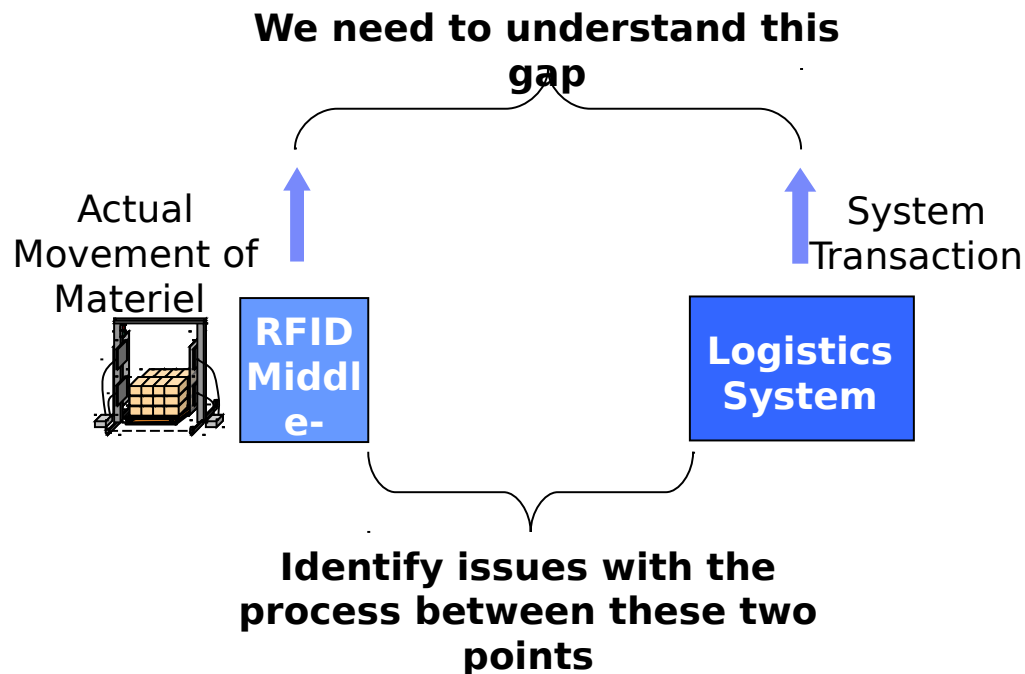
The Alaska RFID Project

Cross-Service implementation of passive RFID technology along multiple supply chain segments at select Department of Defense (DoD) sites (DDJC, Travis, Alaska)

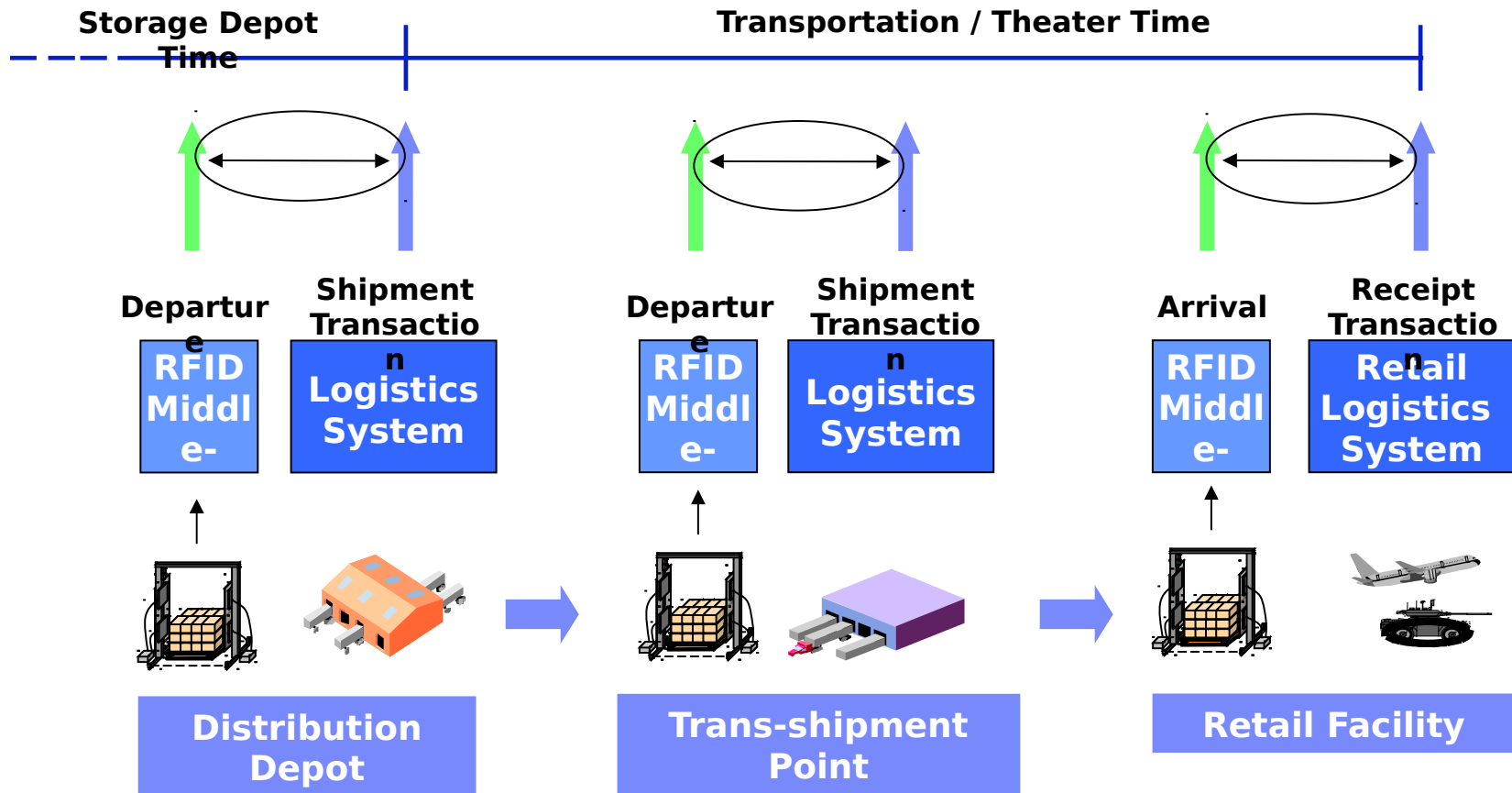
- Objectives of Alaska Project
 - Determine how to automate processes with passive RFID technology & execute RFID enabled processes
 - Determine how to make ITV data available through DoD enterprise capabilities (e.g. DAAS, IDE, AV)
 - Identify business process re-engineering opportunities
 - Quantify the financial benefits



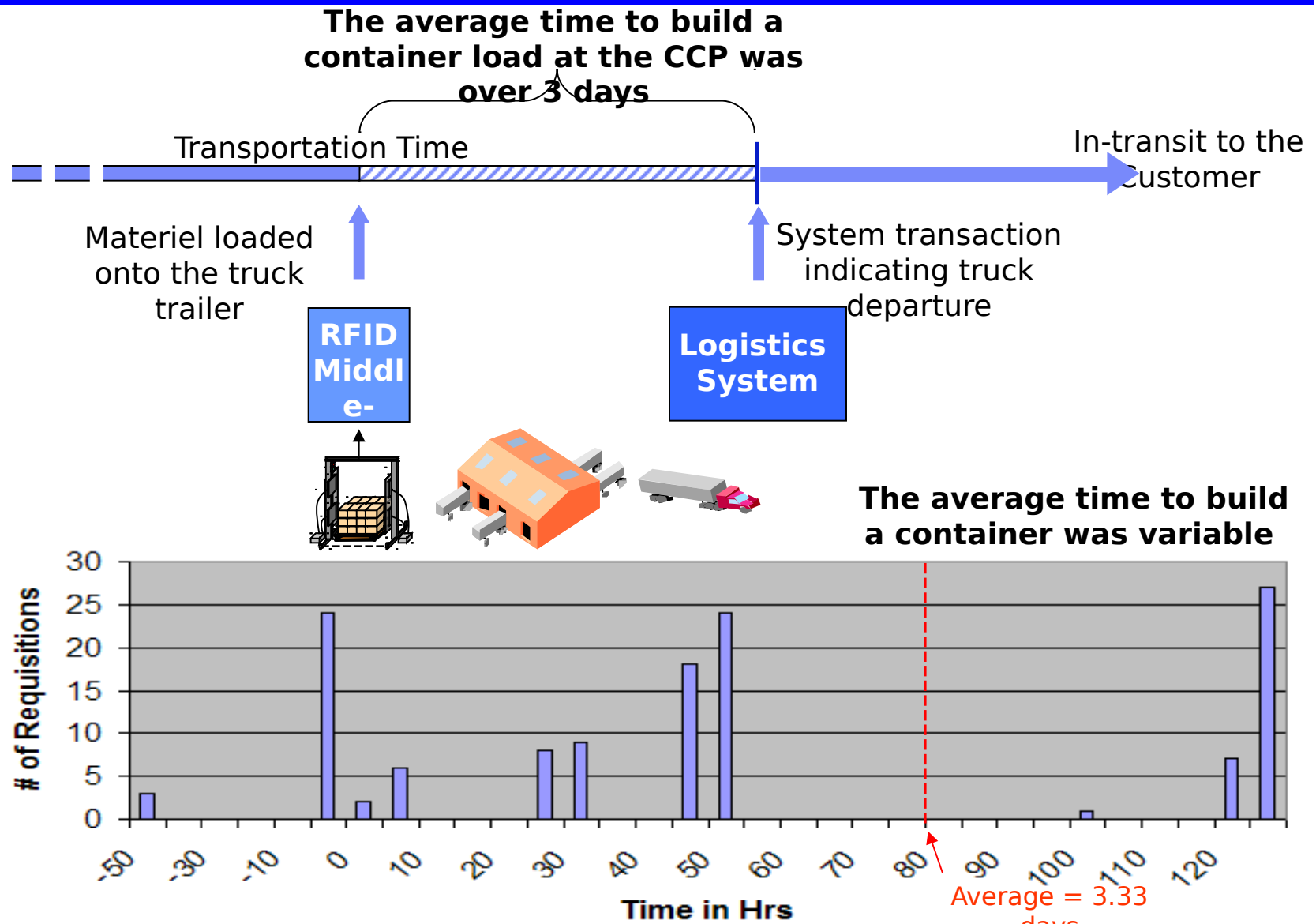
RFID provides a new data point - revealing actual materiel movement more discretely for the first time



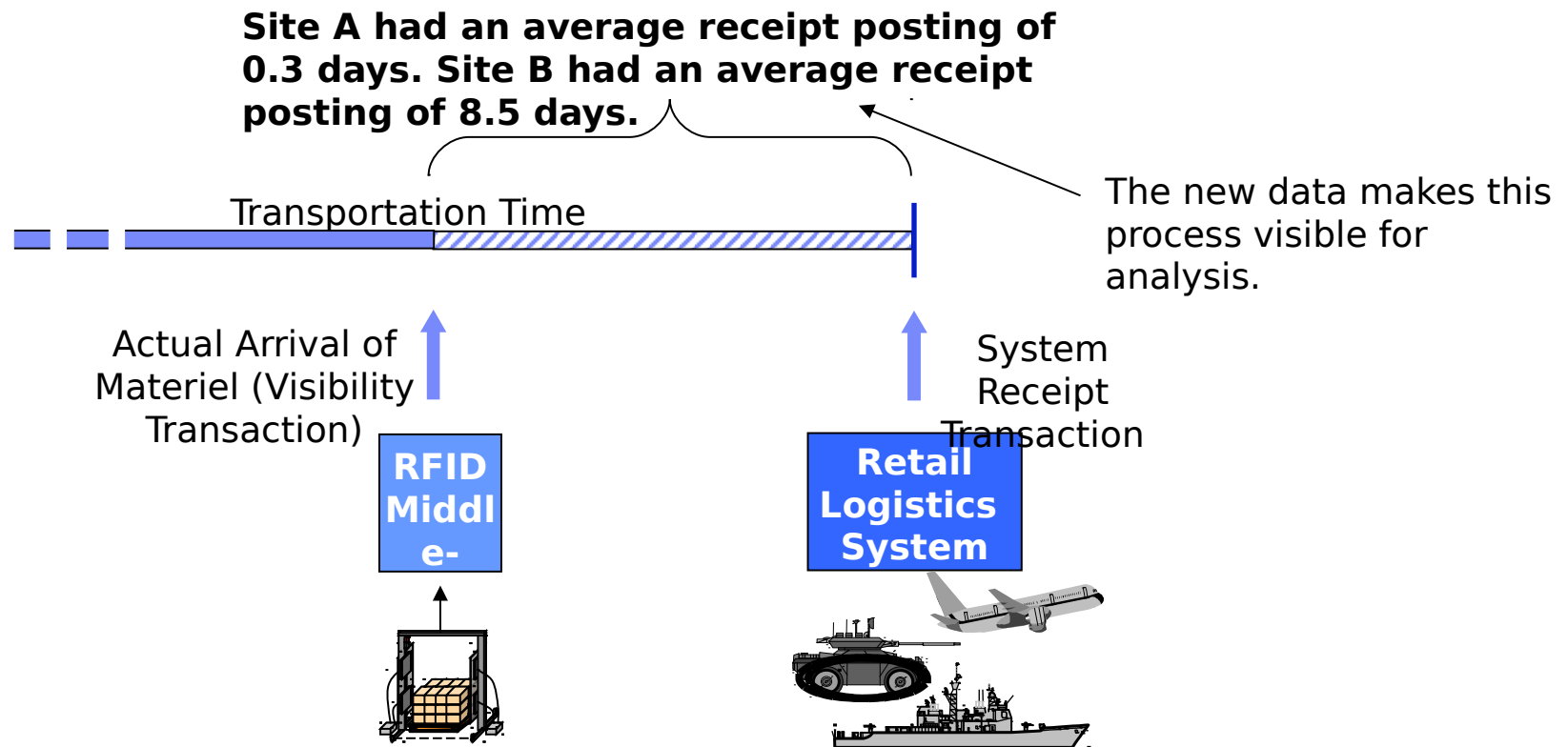
The new RFID data point provides additional insight within the response time segments



RFID reveals potential areas for improvement at the Container Consolidation Point



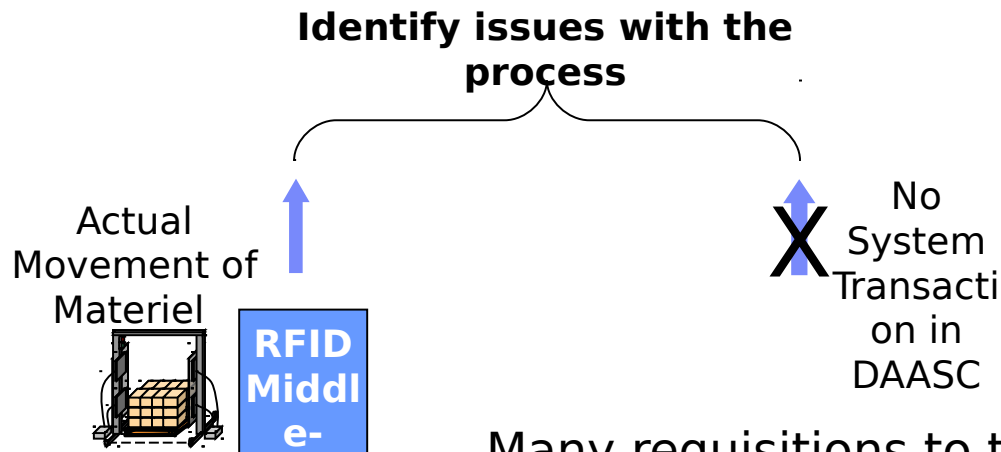
RFID reveals potential areas for improvement at the retail sites



Opportunity: Reduce receipt take-up time

Business Benefits: Materiel to the customer more quickly, Increased throughput

RFID reveals potential areas for improvement at retail sites when there is no system receipt at DAASC



Many requisitions to the Alaska sites did not have a system receipt at DAASC*:

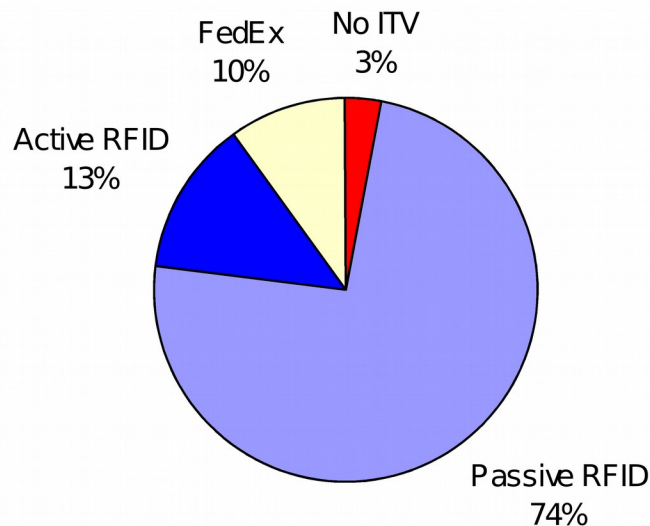
- 19% of the requisitions going to Ft. Richardson
- 26% of the requisitions going to Elmendorf AFB

*Requires additional causative research.

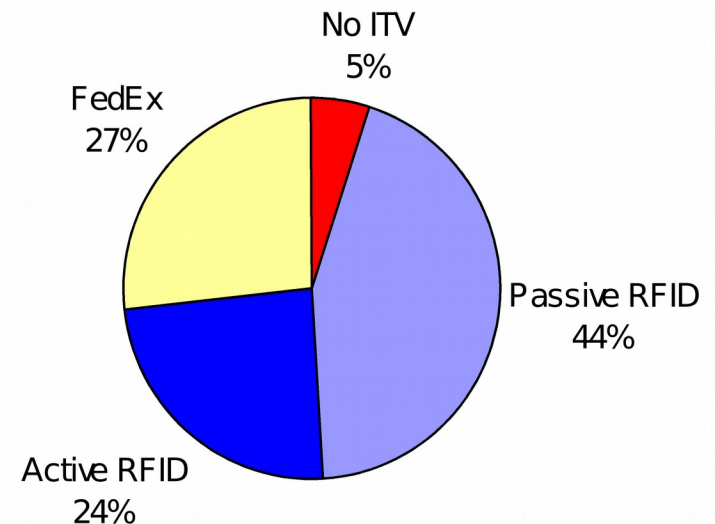
- Receipted in local AIS but not sent to enterprise level?
- Not receipted in local AIS or at enterprise level?

95 - 97% of requisitions were visible at the local site via RFID or FEDEX, despite not having a system receipt at DAASC

Type of visibility at Ft Richardson

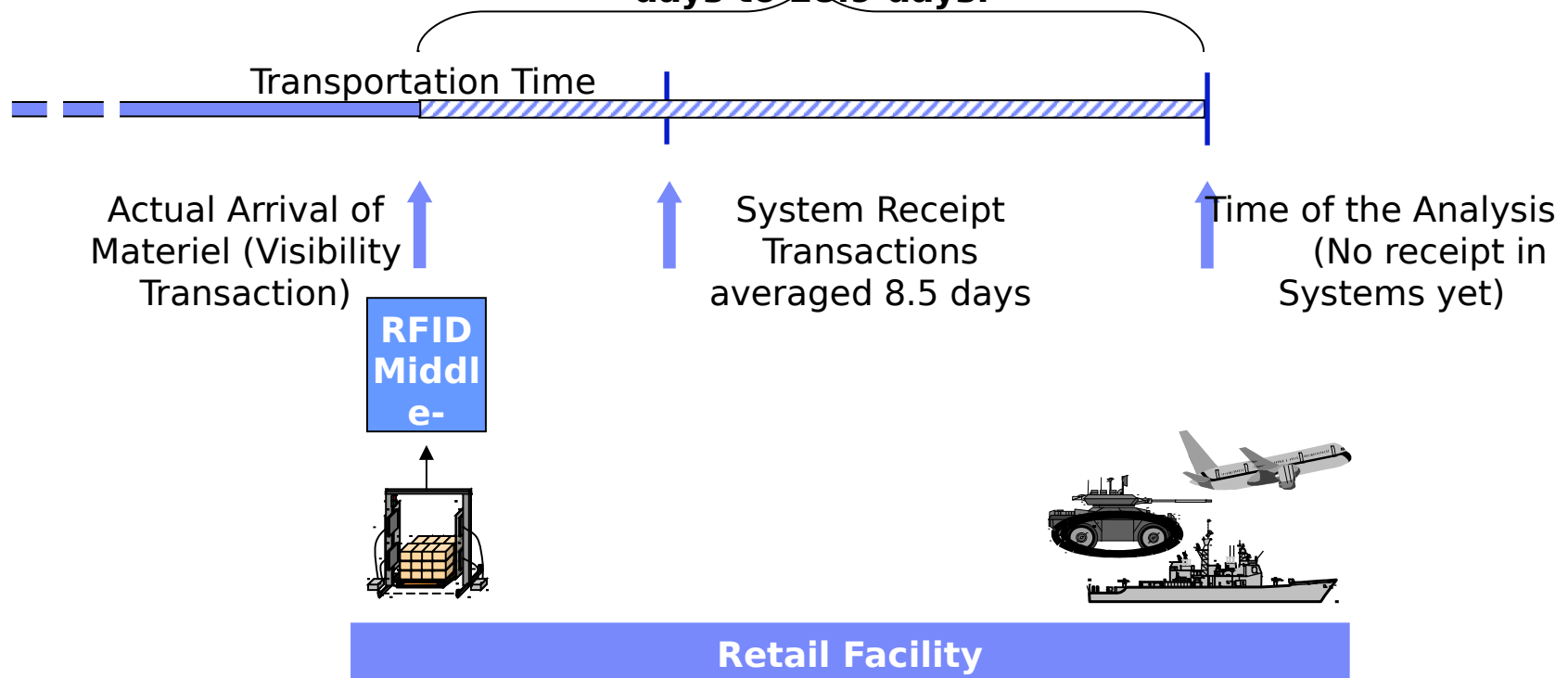


Type of visibility at Elmendorf AFB



Closing receipts in a timely manner produces business benefits

Including requisitions not received, the response time measurement grows from an average of 8.5 days to 28.9 days.



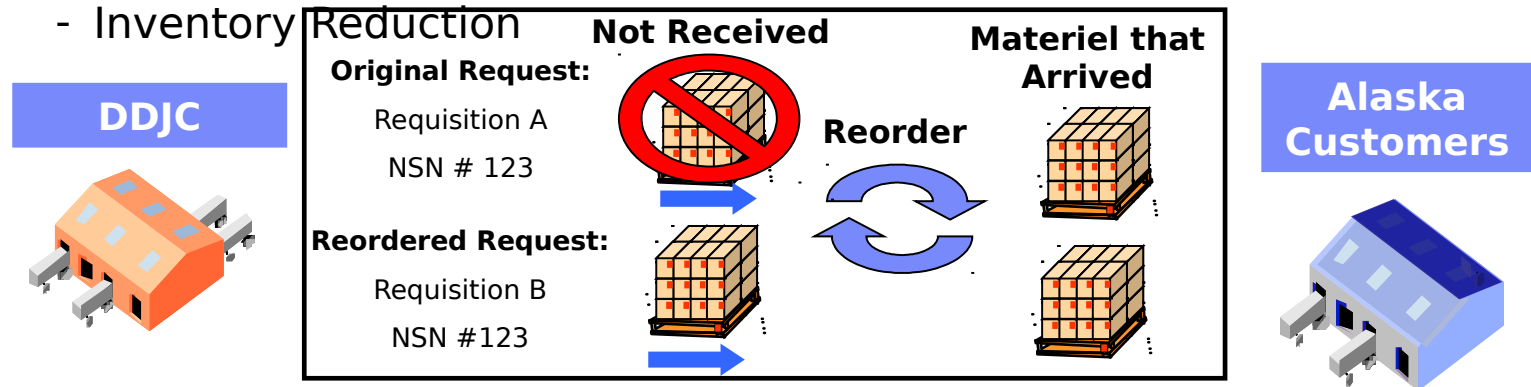
Opportunity: Reduce LRT by eliminating erroneous supply receipt discrepancies

Business Benefits: Reduce erroneous losses, Avoid possible reorders

Estimating a potential business benefit - avoiding reorders

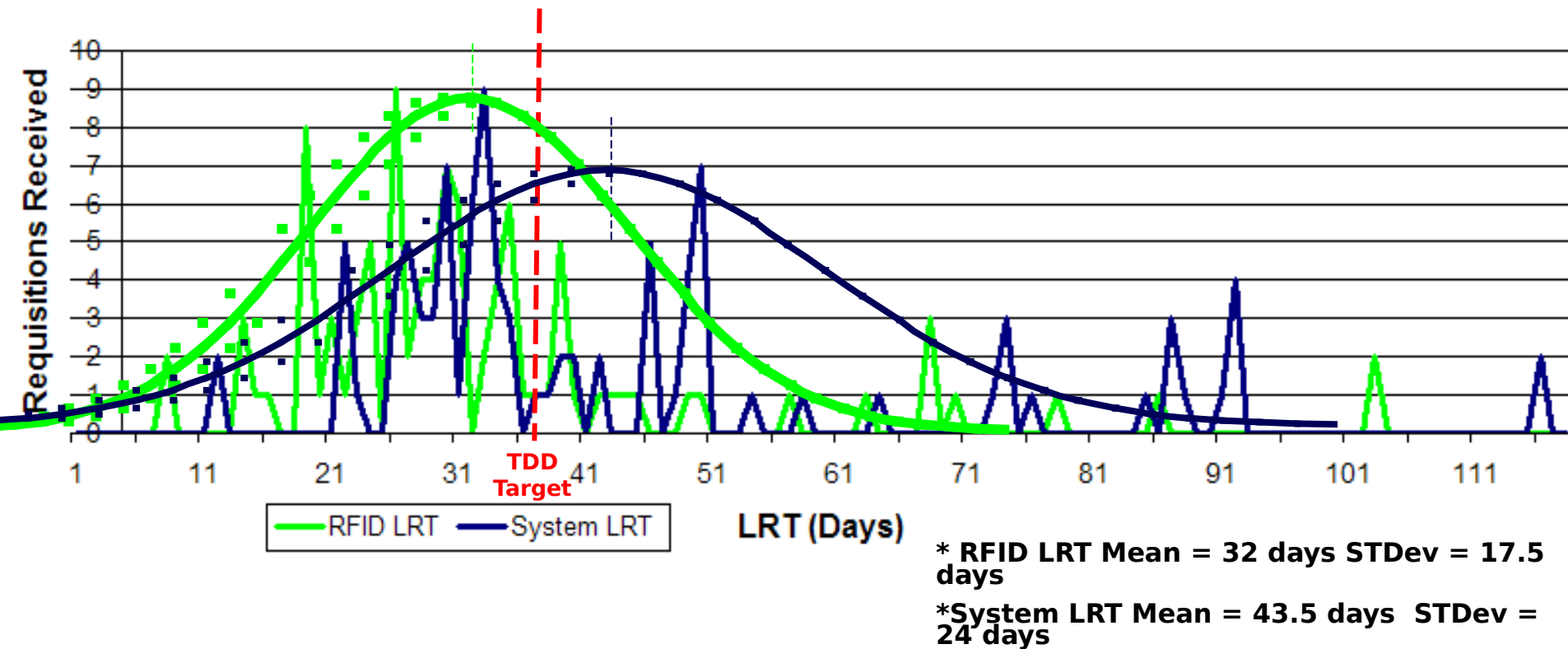
22% of requisitions from DDJC to Alaska sites were never received at DAASC.

- After the expected arrival date, 30.1% of those requisitions had a subsequent requisition by the same unit ordering the same or greater quantity of the same NSN
- The **POSSIBLE** reorders represent 7% of the entire number of requisitions sent to Alaska in same timeframe (June - Sep 2007)
 - Transportation Savings
 - Inventory Reduction



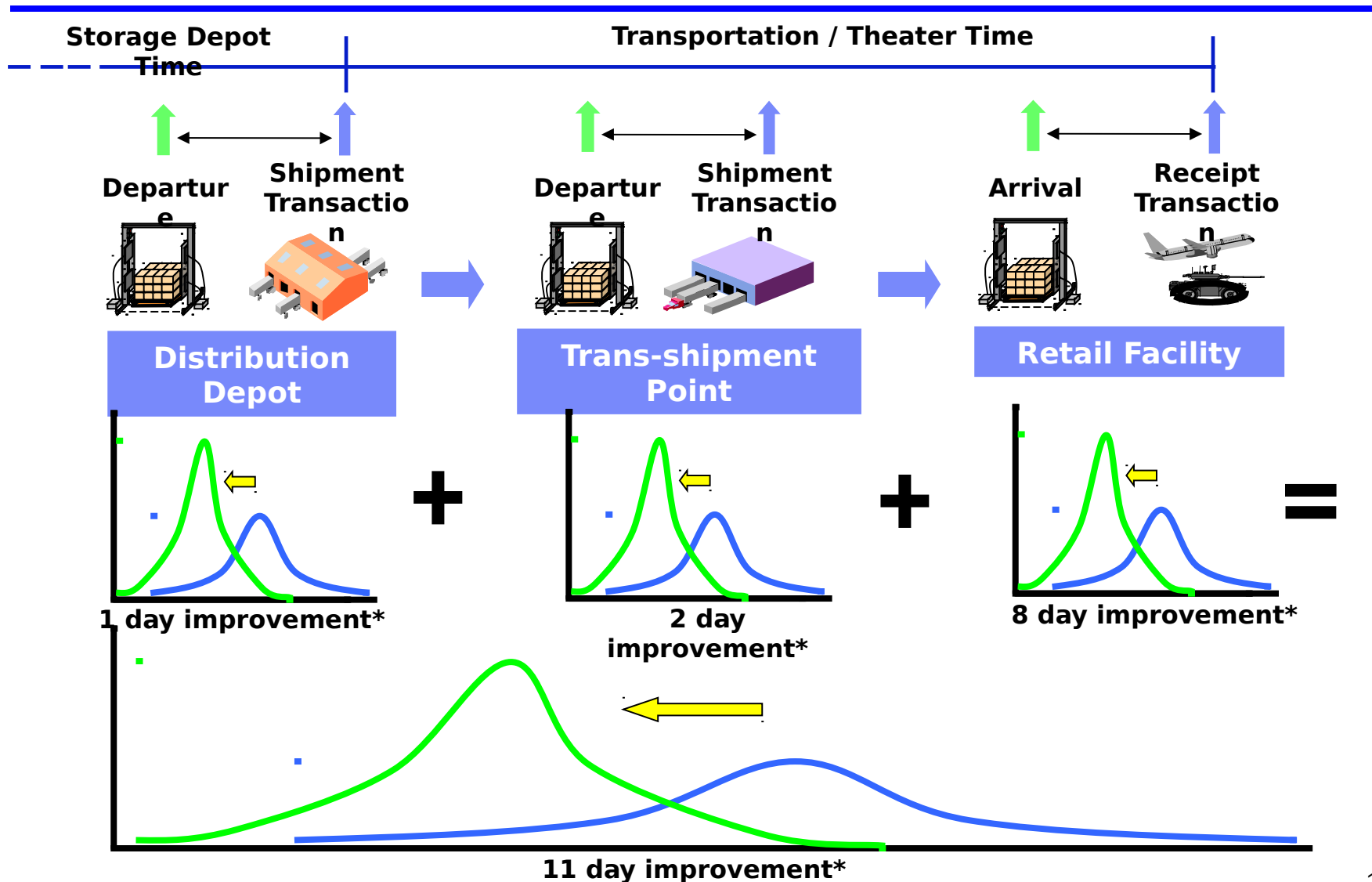
* Requires additional analysis of demand data to confirm if reorders occurred

RFID reveals precise materiel movement, enabling Lean Six Sigma process analysis



68% of Issue Priority Group 3 requisitions actually arrive within the defined Time Definite Delivery (TDD) target of 37 days compared to 56% of system receipts.

Potential improvements will have a cumulative effect across the DoD Supply Chain



*days improvement are

Summary

- Passive RFID provides a new data point
 - Captures precise measurement of materiel flow
 - Identifies potential opportunities for improvement
 - Improved business processes (Lean Six Sigma approach)
 - Timely system updates
- Initial implementations at small sites yield an opportunity for improvement
- Analysis team will continue to work with the Services to enable them to complete, and expand upon, the analysis